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AUTHOR Wheeler, Ann
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ABSTRACT

A cross-matched list of teaching competencies was derived from the Florida Essential Competencies List and the Carey Validation of Self-Evaluation Procedures for Identifying Instructional Needs of Teacher Centers. This list of teaching skills was then used to determine competencies embedded in four models of teaching--a creative process model, a scientific inquiry model, a concept formation model, and a concept attainment model. Sixteen responses from individuals with expertise in models of teaching and instructional design were used to determine the congruence between the models and the skills list in each of five skill categories: planning instruction, evaluating learning, communicating with peers and parents, classroom management, and teacher evaluation. Responses indicated that at least 75 percent of the competencies in each of the four models had congruence to generic skills. Implications for teacher education programs are discussed. A list of teaching competencies is appended. (MJB)

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An Examination of Teaching Competencies Derived from the Models of Teaching and Their Relationship to Generic Skills

by Ann Wheeler, College of Education, Florida State University

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To establish adequate conditions of learning, the teacher must possess or acquire certain skills. The development of needed teacher skills—knowing intellectual development stages, formulating performance objectives, developing questioning skills, sequencing instruction, evaluating progress, developing creativity—is essential. These skills alone, however, are not sufficient. The teacher must determine appropriate classroom environments and acquire the teacher-student interaction skills necessary to achieve instructional and behavioral goals.

The need to increase teacher competence has recently become a concern of the states, school districts, and institutions of teacher education. A call for accountability permeates the educational arena. Teachers are expected to employ instructional techniques that result in increased student learning, and educational institutions are expected to train teachers for such roles.

The increasing need to improve teacher competence and effectiveness is commensurate with our rapidly changing times suggesting a need for a new emphasis in education, new teaching knowledge and skills, and new systems for training teachers. Recent instructional innovations require knowledge and skills sometimes not acquired by initial training but essential for increasing teacher effectiveness.

The call for accountability in teaching has resulted in the derivation, in several states, of generic skills lists for teachers. The need for validation of teacher competencies in terms of student gain criteria has long been recognized, yet studies attempting such validation have demonstrated little success. Many teacher education researchers have identified the selection basis for experimental competencies as a source of this failure. More recently, the use of what are termed "models of teaching" has been suggested as a source of competency derivation.

A model of teaching, as defined by Bruce Joyce in "Models of teaching as a paradigm for teacher education" (1972), is any formalized approach to creating learning environments. Any strategy which suggests specific activities, arrangements, or situations as a means of facilitating learning may be classified as a teaching model. A model of teaching, as defined in *Models of Teaching* (Joyce and Weil, 1972), is an instructional strategy which is considered both a theoretically sound and practically feasible approach to the teaching or training of students.

The *Models of Teaching* approach is one which assumes that no one of these models is superior to all others across differing learning outcomes. An effective teacher is one who can perform a variety of models well and who is able to select the appropriate model for specific types of students to achieve specific types of learning outcomes.

These models of teaching provide theoretically sound sets of competencies which are representative of a total teaching act. The sets of competencies yield specific skills and behaviors for related sequences of instruction which should provide eventual student achievement gains. Because the models of teaching are designed to achieve certain classes of learning outcomes, it should be possible to identify the area and extent of expected student change. Success in training teachers to use the models and in matching models to differing optimum results suggests that further examination of *Models of Teaching* as an approach to training and retraining of teachers should be considered.

The Consensus Analysis Derivation Procedure (Dodl and Freedman, 1974) is a procedure designed to identify and formalize the tasks involved in deriving teacher competencies from models of teaching. The procedure was designed to provide for the identification of competencies representative of various teaching models. The competencies derived represent the total set of teacher behaviors necessary to successfully

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perform the model. The process identifies the sequential and priority relationships of the competencies included. The procedure also insures that the competencies derived are directly related to the specific model under consideration. Thus, the procedure facilitates the task of identifying numerous competency sets representative of a variety of teaching models.

Another attempt at defining necessary teacher skills was undertaken by the Committee of Education for the State of Florida in January, 1975. The primary purpose of this research was to learn if there was professional agreement on any competency or competencies considered essential for all certified personnel in Florida. Of the 48 competencies identified in the study, 23 were accepted as essential.

In a study conducted by Lou M. Carey, 52 generic skills were used to measure teachers' perception, performance, and accuracy of perception on identified teaching skills. These skills, combined with the State of Florida list, were used in this study.

The purpose of the study was two-fold:

1. To derive teaching competencies embedded in four models of teaching. The models used were a creative process model—Synectics—developed by William Gordon, a scientific inquiry model developed by Richard Suchman, a Taba-based concept formation model, and a Jerome Bruner concept attainment model.

2. To cross-match the competency sets derived from the models of teaching with a generic skills list generated by the *Essential Competency Study* (State of Florida, 1975), and *A Validation of Self-Evaluation Procedures for Identifying Instructional Needs of Teacher Centers* (Lou M. Carey, 1976).

The research questions which this study addressed were related to the congruence which could be found between competencies derived from models of teaching and generic skills. The following tables may help to show the similarity that was found between teaching-model competencies and generic skills. Sixteen responses from individuals with models of teaching and instructional design expertise were used to compute the percentages indicated. A 75% response level must have been recorded in a generic skill category for that competency to be considered congruent.

Table 1 indicates the total number of teaching-model competencies in each model that had congruence to generic skills. Tables 2 through 5 indicate the teaching model component competencies which have congruence to each generic skill category.

Table 1
Comparison of Teaching Model Competency Statements and the Percent of Congruence to Generic Skill Categories

Model	Number of Competencies	Number of Congruent Competencies	Percent of Competencies that are Congruent
Taba	69	56	81%
Inquiry	59	46	78%
Synectics	61	50	82%
Bruner	48	36	75%

Table 2
Taba Model Competencies Found to be Congruent to Categories of Generic Skills

	Interaction	Planning	Evaluating Learning	Classroom Management	Teacher Evaluation
Pre-active Support		6 competencies	1 competency	1 competency	
Syntax	22 competencies				
Principles of Reaction	10 competencies				
Social System	6 competencies			2 competencies	2 competencies
Post-active Support			5 competencies		
Total number of congruent competencies	38	6	6	3	2
Number of congruent competencies / Total number of competencies	55%	10%	10%	4%	3%

Table 3
Bruner Model Competencies Found to be Congruent to Categories of Generic Skills

	Interaction	Planning	Evaluating Learning	Classroom Management	Teacher Evaluation
Pre-active Support		7 competencies			
Syntax	13 competencies	1 competency			
Principles of Reaction	8 competencies				
Social System	6 competencies			1 competency	
Post Active Support					
Total number of congruent competencies	27	8	0	1	0
Number of congruent competencies / Total number of competencies	56%	16%	0%	2%	0%

Table 4
Synectics Model Competencies Found to be Congruent to Categories of Generic Skills

	Interaction	Planning	Evaluating Learning	Classroom Management	Teacher Evaluation
Pre-active Support		4 competencies	2 competencies		
Syntax	15 competencies	1 competency			1 competency
Principles of Reaction	9 competencies		5 competencies		
Social System	8 competencies			2 competencies	
Post-active Support			3 competencies		
Total number of congruent competencies	32	5	10	2	1
Number of congruent competencies / Total number of competencies	52%	10%	16%	3%	2%

Table 5
Inquiry Model Competencies Found to be Congruent to Categories of Generic Skills

	Interaction	Planning	Evaluating Learning	Classroom Management	Teacher Evaluation
Pre-active Support		4 competencies	1 competency	2 competencies	
Syntax	12 competencies	5 competencies			
Principles of Reaction	10 competencies			2 competencies	
Social System	4 competencies	1 competency		1 competency	
Post-active Support			4 competencies		
Total number of congruent competencies	26	10	5	5	0
Number of congruent competencies / Total number of competencies	44%	17%	8%	8%	0%

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The data in the preceding tables indicate that at least 75% of the competencies in each of the four models had congruence to generic skills. The tables also indicate that the majority of the competency statements across all four models were found to be similar to the Interaction Skills category. Joyce and Weil, in *Models of Teaching* (1972), define the skills that are necessary to implement a model as *interactive* teaching skills and critical *planning* skills. The emphasis in developing the models—in making theory operational—was to provide a means for describing what teachers *do* when they teach according to one theory or another. The syntax of a model describes the flow of actions; the principles of reaction concern the teacher's responses to the learner; and the social system attends to the kinds of norms that are exchanged. Taking into account the definition of these model components, it was likely that the majority of the competency statements would be interactive ones.

The tables also indicate that many of the competency statements were found to be similar to skills in the Planning Instruction category. The majority of the competencies in all four models were either interactive or planning competencies. The planning steps of a model include topic selection, designing and organizing materials, and selecting behavioral objectives. Sixteen percent of the Bruner model competencies were found to be similar to Planning Instruction skills. Seventeen percent of the Inquiry model competencies had congruence to the Planning Instruction category. Planning competencies require that the teacher provide large amounts of raw data in order for the student to be able to perform mental operations upon the data. The Synectics and Taba models rely less on teacher preparation of materials for lesson development and rely more on student response/participation for the lesson sequence to be completed. Therefore, it might be expected that the Bruner and Inquiry models would encompass more Planning Instruction generic skills.

Sixteen percent of the Synectics competency statements and 10% of the Taba competency statements had congruence to the Evaluating Learning skills category. Both the Synectics and Taba models require sufficient responses from students to provide enough information about concepts before moving to the next analogy or grouping phase. The teacher makes an evaluation of the responses to determine if the students are ready for the next sequence. The Bruner model requires more teacher direction as large amounts of data are acquired. Correct/appropriate responses are more clearly discerned. The Inquiry model requires more student self-evaluation in determining the feasibility of hypotheses and direction for solving a problem.

The Communicating with Peers and Parents skills category encompasses no competency statements in any of the four models which met the 75% criterion of congruence. The models as defined by Joyce and Weil do not prescribe such teacher behaviors in any of the model components.

The Inquiry model has 10% of its competency statements in the Classroom Management skills category. Since the Inquiry process requires enough space and materials for experimentation, it was likely that more of the Inquiry model competencies would be similar to the Classroom Management category than would the competencies in other models. The Synectics, Bruner, and Taba models require less management of space and materials since the models are more teacher-directed and less experimentation in the problem-solving mode is necessary.

Although a few competency statements across the four models met the 75% criterion of congruence in the Teacher Evaluation skills category, most of the evaluative behaviors exhibited in these models will probably occur during model implementation. Evaluation becomes an on-going process for both student and instructor, occurring during or after each phase of implementation.

Nearly all respondents indicated that the majority of the model competency statements had some similarity to the generic skills. On occasion, however, a "none" response was indicated.

The major hypothesis of the study stated that competencies derived through use of the Consensus Analysis Derivation Procedure would be congruent with categories or areas of generic skills.

A reasonable conclusion drawn from the data collected is that the models of teaching provide one possible theoretical framework for teaching and/or demonstrating generic skills.

Program developers in teacher education who have the inclination to develop programs grounded in social science theory may find Joyce and Weil's *Models of Teaching* (1972) an operational method of presenting some selected teaching skills.

However, program developers in teacher education—as well as teachers themselves—would be advised to include additional components that provide training in the reporting of student progress to peers and parents, and the technical aspects of diagnosis, prescription, and evaluation. The techniques involved in the design and development of instructional materials, philosophy of education, and study of child development are not included in model implementation. One can conclude that, if the teaching models alone are used to prepare teachers or increase competence in teaching, the data indicates that the models alone are not adequate.

If program developers are searching for a sound theoretical framework in which critical interactive behaviors are taught, the teaching models analyzed showed considerable congruence to the Interaction Skills category. If a teacher education program included all of the congruent competencies in this category, one might consider the training fairly comprehensive.

Again, program developers could also use the teaching models as a resource for training in planning skills. Extensive preparation in regard to materials and lesson development is needed to implement the four models analyzed. With more emphasis on the technical aspects of materials design and development, the teaching models should encompass many of the remaining skills necessary for thorough planning.

The teaching models will help the novice teacher and the experienced one develop better Classroom Management skills. However, some of the elements of space, noise, color, design, open and self-contained arrangements, as well as usage of some media are not included in the models design.

Some elements of evaluation are embedded in the models. However, teachers must administer and evaluate test results, prescribe instruction based on those results, design tests, and keep extensive records on students. The teaching models only prescribe behaviors in some of these areas. Additional program courses or components would have to supplement those competencies.

The increased interest throughout the nation in generic teaching skills, the mandate from state departments of education, and requirements for demonstration of competence prior to certification imply quantum changes in teacher education practices. Before moving too rapidly in the direction of requiring demonstration of numerous generic skills, it would be appropriate to consider how practicing educators might increase their competence in generic teaching skills.

The lack of specific training procedures for preservice and inservice education programs gives impetus to the idea of matching teaching-model competency sets to generic skills lists required to carry out the many teaching roles. To effect student change, teacher behavior must first be changed. The repertoire of skills developed by using the models of teaching enables the teacher to employ skills that match individual learning styles. The teaching models become a vehicle to the attainment and demonstration of certain generic skills.

BRUNER COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
PRE-ACTIVE SUPPORT							
1. Develop games, explore possible strategies for analysis and practice of concepts.							
2. Arrange classroom environment so as to foster exploration of concepts at various levels.							
3. Design learning experiences which include opportunities for inquiry discussion and experimentation.							
4. Select examples and non-examples of concepts.							
5. Select the most appropriate media to present the concepts.							
6. Select and/or develop content appropriate for specific age levels.							
7. Organize activities into developmental sequence of experiences.							
8. Select and/or develop materials appropriate for the content and level.							
SYNTAX							
9. Provide practice for concept formation.							
10. Help pupil make application of his concept attainment strategies to many situations.							
11. Provide data from which students can analyze concepts using strategies that have been developed by the students.							
12. Direct student's evaluation of own thought processes.							
13. Compare students' ideas by drawing relationship between them and others experienced elsewhere.							
14. Provide activities in which the students can evaluate their own ideas.							
15. Provide unorganized data from which students can extract attributes which define the concepts to be attained.							
16. Initiate activities that lead to development of strategies for analysis of concepts.							
17. Direct problem solving and critical thinking activities.							

BRUNER COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
18. Provide the necessary amount of structure, organization, and explanation for each learning activity to prevent undue confusion during the lesson.							
19. Provide appropriate experiences to promote reasoning.							
20. Make students aware of the fact that they are dealing with hypotheses that need exploration.							
21. Provide games that aid in attaining concepts.							
22. Conceptualize abstract information in practical, operational terms.							
23. Utilize stimuli appropriately in terms of the concepts and the students to be taught.							
24. Present a concept or principle in a game format.							
25. Motivate and facilitate optimum learning in the subject area being taught by providing appropriate situations.							
26. Encourage activities in which pupils learn about their own participation in the learning process.							
27. Provide stimulating ideas for discussion.							
28. Encourage students to initiate learning activities.							
29. Engage students in identifying, seeking out, and evaluating resources for learning activities.							
SOCIAL SYSTEM 30. Develop an equalitarian atmosphere of shared decision making in the classroom, conducive to spontaneity, creative thinking, and self-directed learning.							
31. Provide opportunities to develop decision-making skills and self-direction.							
32. Avoid interference of personal views with objective information.							
33. Cause students to be self-directed rather than teacher-directed.							
34. Foster cooperation among pupils.							
35. Develop group knowledge and cohesion.							

BRUNER COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
36. Develop relations among pupils that are cooperative.							
37. Provide an "open" atmosphere.							
38. Provide opportunities for peer interaction.							
39. Provide for a relaxed atmosphere.							
40. Aid students in responding critically and constructively to one another.							
PRINCIPLES OF REACTION 41. Channel discussion so as to focus on concepts to be attained rather than deviate from the subject.							
42. Maintain focus on specific concepts or concept families during discussion.							
43. Redirect questions.							
44. Provide for peer responses and inquiry.							
45. Foster inquiry into problem posed by students.							
46. Respond positively to student contributions.							
47. Synthesize, without editorializing, students' opinions.							
48. Support students' responses.							

INQUIRY COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
PRE-ACTIVE SUPPORT							
1. Assess current needs of the students.							
2. Arrange a classroom environment where experimentation can take place.							
3. Provide large amounts of raw data and/or materials that will cause valid confrontations.							
4. Allow for maximum interaction by specific attention to spacial arrangement and work group formation.							
5. Establish an emotional climate in the classroom which pupils perceive as open to their responses.							
6. Organize supplies, equipment, and other physical resources within the room for maximum utility by students.							
7. Identify relevant examples which establish beginning framework for process.							
8. Prepare materials for the varied levels of learning ability of students.							
9. Adequately prepare directions for carrying out each phase of inquiry process.							
SYNTAX							
10. Design learning experiences which develop inquiry, decision-making, and problem-solving skills.							
11. Guide students through inquiry process.							
12. Provide student confrontation with a problem/issue.							
13. Teach students to inquire into collection and analysis of data, and generation of hypotheses using questioning strategies.							
14. Help students learn about the properties of objects either by verifying questions or verbal experimentation.							
15. Help students ascertain the conditions of each object before and after the occurrence of events.							
16. Synthesize the data to help students discover the relationship between conditions and events.							

INQUIRY COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
17. Facilitate the isolation and identification of relevant variables and necessary conditions of the occurrence.							
18. Facilitate the explanation of changes that occur to hypothesize causal relationships.							
19. Initiate student questions that in the beginning analyze the situation as they observe it.							
20. Encourage questions later in the process that address relationships among variables.							
21. Encourage verbal or actual experimentation of data collected.							
22. Provide time for the analysis of the inquiry strategy with an emphasis on the development of more effective strategies.							
23. Develop in students cognitive skills of searching for information and data processing.							
24. Help the student to inquire autonomously and productively by building concepts through analysis of concrete episodes and the discovery of relationships between variables.							
25. Outline a deductive sequence to carry out given objectives.							
26. Incorporate student data during instruction in the planning of subsequent activities.							
27. Perceive alternative solutions to problems that face the student.							
28. Plan for extended learning experiences in which students can demonstrate applications of required knowledge.							
29. Plan for skill progression at all levels of ability.							
30. Develop flexible assignments.							
31. Give students opportunity to exercise informal leadership.							
PRINCIPLES OF REACTION							
32. Create an atmosphere where there is freedom for experimentation and evaluation.							
33. Maintain consistency as to what is expected of pupils without losing flexibility and adaptability to changing circumstances.							
34. Foster independent study and supervision.							

INQUIRY COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
36. Foster independent and responsible thinking among students by encouraging them to consider conflicting evidence, ideas, and values.							
38. Utilize the pathways of communications which function between individuals and within groups.							
37. Encourage the recognition and formulation of problems to be solved in social living.							
38. Use open-ended questions.							
39. Ask evaluative questions.							
40. Ask questions calling for interpretation of facts.							
41. Accept the feelings of students while holding the students responsible in the cognitive domain.							
42. Demonstrate an open communicative style.							
43. Allow students to verbalize explanatory or theoretical formulations.							
44. Make no attempt to explain events to the students or render judgements about their theories.							
45. Encourage an open inquiry where responsibility for initiative and control in the learning situation rests clearly with the students.							
SOCIAL SYSTEM							
46. Foster an atmosphere of cooperation.							
47. Control movement from one task to another throughout inquiry process.							
48. Encourage free exchange of relevant ideas.							
49. Establish an egalitarian norm where students and teachers can inquire as equal participants.							
50. Encourage students to initiate the inquiry.							
51. Turn student questions back to the students to further their attempts at data collection.							
52. Insist on students turning their inquiry into their own strategies in order to examine their own environment.							

INQUIRY COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
53. Encourage self-investigation, turning students' attention to their own process of thinking.							
54. Prepare sets of materials that cause valid confrontations.							
POST-ACTIVE SUPPORT 55. Develop indicators of student performance, student attitude, and student motivation of inquiry during the times that the student is not in direct interaction with the teacher.							
56. Analyze patterns of interpersonal relationships existing in a classroom by use of structured observational techniques.							
57. Evaluate students' ability to think deductively and analytically.							
58. Redirect questions to pupils to help them diagnose their own learning problems.							
59. Provide activities by which students can evaluate their own progress.							

SYNECTICS COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
PRE-ACTIVE SUPPORT							
1. Outline a sequence of stretching exercises to prepare students for metaphoric activity.							
2. Select a topic which will enhance mastery of certain thinking skills.							
3. Outline specific analogies that follow the sequence of thought processes.							
4. Choose a topic, theme, or skill relevant to curriculum content, behavioral problem, or social issue.							
5. Create a classroom environment to facilitate active interaction between student and student, student and data, student and instructor.							
6. Collect data in regard to student response in stretching exercises.							
7. Analyze responses in terms of behavior, understanding of analogies, and acceptance of topic.							
SYNTAX							
8. Orient students to the subject which is selected for analogous discussion.							
9. Explain attitudes, values, beliefs, or knowledge/skill extension expected at completion of process.							
10. Guide students through stretching exercises which use the personal and direct analogies.							
11. Design specific opening metaphoric activity appropriate to group abilities, interests, and learning styles.							
12. Design analogy exercises that provide for maximum creation of conceptual distance from organic or inorganic concepts.							
13. Elicit description of present condition of topic, theme, skill, from students.							
14. Lead students to explore topic through direct analogy.							
15. Lead students to examine direct analogy through personal analogy.							
16. Lead students to examine and explain similarities between new data and direct analogy.							

SYNECTICS COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
17. Lead students to examine data collected and create a compressed conflict.							
18. Encourage students to generate further analogies.							
19. Guide students in reconsidering original topic, theme, skill by utilizing analogies generated in the whole process.							
20. Encourage two-way communication skills throughout the interactive process.							
21. Provide stimulus to the discussion by asking clarifying, probing questions.							
22. Remain open and non-judgemental to all student responses.							
23. Identify, isolate, and solve children's difficulties with metaphoric process.							
24. Capitalize on values and opinions of students.							
25. Use open-ended small group discussions to facilitate metaphorical problem solving.							
26. Monitor and criticize your own teaching behavior.							
27. Accept differing attitudes and values of students.							
28. Function in non-authoritarian role.							
SOCIAL SYSTEM 29. Provide opportunity for all students to react to topic, theme, or skill.							
30. Provide the necessary amount of explanation so that each metaphorical activity is clearly understood.							
31. Utilize a group structure which facilitates the varied response needed for the metaphoric process.							
32. Assume role as a guide, facilitator of discussion.							
33. Be accepting, non-judgemental of any student response.							
34. Establish an atmosphere of trust among students to encourage risk-taking.							
35. Communicate respect for individual difference of attitudes, beliefs, and values.							

SYNECTICS COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
36. Encourage active response from all students so that large amounts of data will emerge.							
37. Maintain organization and control of movement from one metaphoric activity to another by guiding the discussion.							
38. Structure environment openness and experimentation.							
39. Provide work space for students that can be regarded as their own.							
40. Encourage cooperation in the creative problem-solving process.							
PRINCIPLES OF REACTION							
41. Evaluate students' ability to create conceptual distances from original concept.							
42. Evaluate students' ability to accept other student responses.							
43. Evaluate students' ability to interact, challenge, and extend others' responses.							
44. Encourage students to evaluate their participation in relationship to each analogy phase.							
45. Provide written or verbal evaluation of original problem or task.							
46. Initiate and guide sequence of activities.							
47. Interpret student responses for ability to create something new and/or solve problems.							
48. Give dynamic feedback to students.							
49. Encourage interactive small group discussion.							
50. Clarify and summarize student responses.							
51. Assume a non-judgemental, reflective stance throughout the process.							
52. Accept the bizarre and unusual student response.							
53. Evaluate objectively the effect of student behavior.							
54. Induce psychological states that will help to generate creative response.							

SYNECTICS COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
55. Display usage of the non-rational to encourage the reluctant student to indulge in irrelevance, fantasy, and symbolism.							
56. Give examples of metaphoric response as part of direction for each sequence of activities.							
POST-ACTIVE SUPPO. T							
57. Analyze student response in terms of behavior, understanding of concepts, acceptance of conceptual distance from original concept.							
58. Evaluate student ability to accept and understand metaphoric activity in regard to personal problems, social issues, curriculum content.							
59. Adjust content or process based on student difficulty to create analogies.							
60. Summarize and interpret personal analogies, direct and compressed conflict analogies for future instruction.							
61. Evaluate student ability to reexamine task in new way.							

TABA COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
PRE-ACTIVE SUPPORT							
1. Prepare the classroom setting to permit an active transaction between the learner and data.							
2. Set the environment in a way that material will become available to the individual.							
3. Prepare large quantities of materials that will yield raw data.							
4. Outline an inductive sequence of experiences to stimulate students' performance of mental processes.							
5. Select activities on basis of individual mastery of certain thinking skills.							
6. Match level of teaching strategies with level of individual thought.							
7. Diagnose the type and level of thought processes in the student.							
8. Outline specific teaching strategies that follow the sequence of thought processes.							
9. Select content appropriate for goals and level of class.							
SYNTAX							
10. Lead students to defend their verifications against scrutiny by others.							
11. Request that the student attempt to verify the predictions or to identify the conditions which would verify the predictions.							
12. Lead students to explain or support the predictions or hypotheses which were made.							
13. Request the students to predict consequences, explain unfamiliar data or hypotheses.							
14. Guide students to identify implications which lie beyond the cause and effect relationship identified, i.e., to make inferences.							
15. Lead students to relate points to each other and determine the cause and effect relationship which relates data.							
16. Request students to explain items of identified information.							
17. Guide students to identify points that differentiate particular data.							

TABA COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
18. Solicit students labeling of the groups formed.							
19. Ask the students to group the listed items on the basis of similarity.							
20. List the identified items.							
21. Give the students the opportunity to record their responses.							
22. Use eliciting questions to guide student identification of items.							
23. Provide appropriate stimulus to promote the identification and enumeration of data.							
24. Ask questions that require other than rote memory to answer them.							
25. Ask thought-provoking questions.							
26. Focus the discussion to minimize irrelevant digressions.							
27. Lead discussion effectively.							
28. Remain open to change materials, sequence, and procedures.							
29. Help students learn techniques of sorting information.							
30. Guide student in learning how to discard old ideas, how and when to replace them.							
31. Provide ample opportunity for use of language by students.							
32. Isolate, discuss, and solve possible problem spots during the instruction.							
33. Take cues from children's contributions.							
34. Identify pupil's learning difficulties.							
SOCIAL SYSTEM 35. Provide opportunities for achieving success for all students.							
36. Maintain consistency as to what is expected of pupils without losing flexibility and adaptability to changing circumstances.							
37. Provide the necessary amount of structure, organization, and explanation for each learning activity to prevent undue confusion during the lesson.							

TABA COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
38. Set an attitude of confidence, trust, and hope in students.							
39. Reflect a sensitivity to the self-concepts of others.							
40. Practice consideration, respect, and positive attention for everyone.							
41. Communicate respect and appreciation for individual differences, for beliefs, values, opinions, and ideas different from his own.							
42. Encourage the free flow of communications so that all the data relevant to group choices is equally available to all members.							
43. Create a classroom climate that is lively, and encourages student participation.							
44. Induce climate of information sharing among pupils.							
45. Maintain an effective balance of freedom and security in the classroom.							
46. Demonstrate effective student organization and control.							
47. Adjust group organization and focus to increase involvement of group members.							
48. Develop group knowledge and cohesion.							
49. Identify group roles played by self and others in different situations.							
50. Recognize that each person has a contribution to make to the group.							
PRINCIPLES OF REACTION 51. Encourage students to initiate self-directed learning.							
52. Develop independence and autonomy on the student's part in all areas of the program.							
53. Stimulate students to perform complex mental processes.							
54. Modify instructional activities contingent upon student responses during the activity.							
55. Synthesize, without editorializing, all student opinions.							
56. Offer progressively less and less direct support to students in their performance of complex mental processes.							

TABA COMPETENCY SET	GENERIC SKILL CATEGORIES						
	Interaction Skills	Planning Instruction	Evaluating Learning	Communicating with Peers and Parents	Classroom Management	Teacher Evaluation	None of these
57. Use feedback information from individual students as a basis for modifying the message being communicated.							
58. Turn a mistake into a positive teaching-learning situation by analyzing the reasons for the mistake and making suggestions and encouraging discoveries.							
59. Compare a student's idea by drawing a relationship between it and ideas expressed earlier by the students or the teacher.							
60. Expand on a student's idea.							
61. Exhibit non-judgemental behavior and delimit use of judgemental behaviors.							
62. Accept the thinking strategy of a student as legitimate for him at that time.							
POST-ACTIVE SUPPORT							
63. Revision of procedures, materials, and methods in an attempt to come closer to desired student performance levels of goals.							
64. Evaluate the results of the use of specific strategies with individual students.							
65. Analyze the effect of his own teaching behavior in terms of students performance and attitude.							
66. Evaluate performance and attitudes of students in order to revise topics.							
67. Analyze group and individual strengths and weaknesses.							
68. Assess student learning other than subject matter mastery.							
69. Evaluate a student as his performance and interests change.							